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Of Chinese National Oil Companies

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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АННОТАЦИЯ

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Описание цели, задач и основных результатов	<p>Целью исследования является идентификация стратегий интернационализации китайских национальных нефтяных компаний (ННК), а также основных факторов, оказывающих влияние на формирование данных стратегий. Для достижения цели применяется метод кейсов, позволяющий изучить детали и контекст действий, направленных на интернационализацию. Задачами исследования стали: создание репрезентативной выборки кейсов, разработка алгоритма формализации стратегий интернационализации, идентификация и структуризация стратегий интернационализации китайских ННК, формирование рекомендаций для российских компаний на базе успешного опыта китайских ННК.</p> <p>В результате исследования выявлено, что стратегия интернационализации китайских ННК имеет двухуровневую структуру. На первом, корпоративном уровне, решаются проблемы управления портфелем проектов и поддерживающими видами деятельности (финансирование, связи с правительством, HR). Корпоративная стратегия разрабатывается, в значительной степени, для достижения целей международной политики КНР, и в течение последних 15 лет реализуется в форме стратегии экспансии.</p> <p>На уровне отдельных проектов планируются основные виды деятельности. Эти стратегии формируются под влиянием ряда факторов (политический риск, законодательство, экономическая ситуация в принимающей стране и т.д.), могут интерпретироваться в рамках модели товарно-рыночной экспансии И. Ансофа и решают проблемы выбора подразделения компании для участия в проекте, формы реализации проекта (альянс, совместное предприятие, поглощения) и структуры собственности.</p> <p>В рамках исследования также сделан вывод о том, что использование алгоритма может повысить эффективность интернационализации российских ННК и помочь им в процессе взаимодействия с китайскими нефтяными компаниями.</p>
Ключевые слова	Интернационализация, национальные нефтяные компании, стратегический менеджмент, Китай

ABSTRACT

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Master Thesis Title	Internationalization Strategies of Chinese National Oil Companies
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Description of the goal, tasks and main results	<p>The aim of this study is to identify the internationalization strategies of Chinese national oil companies (NOCs), and to detect the main factors that shape these strategies. Multiple case study methodology is employed to develop a detailed contextual understanding of the internationalization activities undertaken by Chinese NOCs. The objectives were outlined as follows: 1) draw up a representative case list, 2) formulate an algorithm that would describe the process of development of internationalization strategies, 3) identify and structure Chinese NOCs' internationalization strategies, 4) develop recommendations for Russian companies based on Chinese NOCs' internationalization activities.</p> <p>The study has revealed that Chinese NOCs' internationalization strategy is twofold. Corporate level strategy is designed to shape the project portfolio and to manage the support activities (financing, relations with the government, HR). This strategy is aimed at attaining the goals inspired by the PRC's foreign policy, and can be identified as expansion.</p> <p>Project strategies are designed to manage primary activities within each particular project. These strategies are shaped by a number of factors (level of political risk, legal environment, economic environment of the host country, etc.), and can be described in the terms of the growth matrix developed by Igor Ansoff. The strategies determine the most suitable business unit, manner of project execution (alliance, joint venture, acquisition), and the ownership structure.</p> <p>The study has also revealed that the algorithm that describes the process of development of internationalization strategies may be used by Russian NOCs to increase efficiency of their internationalization activities, and to facilitate their interaction with Chinese NOCs.</p>
Keywords	Internationalization, national oil companies, strategic management, China

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Introduction

Beginning of the 21st century was the time when some major changes in the world's economy took place. Developing countries started their impressive rise to world leadership, while gaining economic power and international influence. This process has been fuelled by different factors in Russia and China, that both belong to the largest developing economies in the world. In Russia, the progress was largely driven by its national oil companies, following the rise in oil prices. In China, foreign investment and manufacturing helped to boost the economy. However, these two countries share a lot of very important characteristics and trends.

First of all, both Russia and China share a socialist past and have a strong state, i.e. their governments exercise a very high degree of influence over many areas of the economy and own a lot of different enterprises within the so-called pillar industries. Second, both countries have established special umbrella organizations that united largest state-owned companies in various strategic industries to manage them more effectively. Also, a series of market reforms has been conducted to change the old-fashioned non-efficient state-owned enterprise (SOE) model and allow the companies be driven by market forces. One of the organizations established to boost the profitability of SOEs was China's State-owned Assets Supervision and Administration Commission of the State Council (SASAC). It was created in 2003 and originally managed over 200 large holding companies and about 150,000 small enterprises. By 2013, the number of SASAC-controlled entities shrank to 117, partly due to sell-off and partly because some large-scale mergers took place. The list of the companies is not finalized yet and is expected to drop under 100 in the coming years. **However, the largest portion of revenue, profit and assets is generated by only a handful of companies, among which national oil companies (NOCs) play the most prominent role.** There are only two major NOCs in China, and the industry is very centralized. They are also the most actively internationalizing Chinese companies, just as their peers in Russia.

Today, oil accounts for almost 50% of energy consumed worldwide and it is the main source of revenue for many countries across all continents. Generally, oil companies can be divided into two categories: those owned by national governments (NOCs), and those owned by private investors (international-owned companies, IOCs, such as Shell, ConocoPhillips, etc.). **National-owned companies possess 90% of world's oil & gas reserves and account for 75% of production.** Private international oil companies have 10% of worldwide reserves, but account for 25% of total output.

The role of NOCs has been growing over the last two decades. The composition of worldwide oil reserves ownership has been changing accordingly. Some of the largest NOCs by

oil reserves, output and revenue are Chinese companies owned by the government. **One of them is China Petrochemical Corporation (Sinopec Group) with its publicly traded subsidiary China Petroleum and Chemical Corporation Limited (Sinopec Limited).** Sinopec Limited is the largest oil company in China by revenue (\$440 billion in 2014) and one of the most active players in the fields of international alliances and M&A (Sinopec Annual Report 2014). While mostly owned by the government, it pursues a market-driven strategy trying to increase margins, secure higher profits and diversify risks. However, state support remains an invaluable resource for the company to attain its goals and grow further. The company has historically focused on the downstream sector of oil production and started to actively internationalize earlier than other major Chinese NOCs. In the mid-2000s the company had a greater need to go overseas in order to level its downstream operations with inputs, i.e. to have more crude oil to process. Although the company operates on its own, one should be able to see the State behind it and understand that Sinopec is a member of a large, SASAC-managed family, with other major NOCs belonging to it as well.

The other major oil company in China is China National Petroleum Corporation (CNPC) with \$425 billion revenue in 2014 and its traded arm PetroChina. Sinopec, being the largest NOC out of two in terms of revenue, and the most actively internationalizing one, is the most representative company to study. Its operations and strategy is similar to and aligned with that of CNPC, and by focusing on Sinopec, we will be able to make generalizations for the whole industry.

Chapter I. Literature review

1.1 Literature review

Theoretical materials related to our topic can be split into three groups: 1) general studies on internationalization and internationalization of firms from emerging market economies 2) studies on state capitalism and the specific features of the Chinese internationalization strategy 3) studies on internationalization of Chinese NOCs. Since the developing capitalist economies with strong state have become the talk of the town only in the 21st century, and the science of management faced the rapidly internationalizing NOCs only recently, the volume of relevant literature is rather limited, but the importance of the phenomenon suggests that a certain amount of studies has been conducted.

1.1.1 Studies on the theory of internationalization

Internationalization can be defined in many ways, as increased international involvement and the associated changes in organizational forms (Bilkey, Tesar 1977) or simply as outward movement in a firm's international operations (Turnbull 1987). But whatever the definition, the essence remains the same. When a company expands its operations into other countries increasing its global presence it internationalizes.

Adam Smith was one of the first economists to discuss internationalization stating that it results from the absolute cost advantage of one entity over the other. He claimed that a larger number of the same goods or services can be produced with a different amount of labor. The party that uses less labor has the absolute cost advantage and therefore can export at a competitive price (Smith 1776).

David Ricardo thought that Smith's concept was incomplete and didn't account for the opportunity costs. In Ricardo's view expressed in 'Principles of Political Economy and Taxation', under free trade, an agent will produce more of and consume less of a good for which he has a comparative advantage. This way, the concept of comparative advantage was developed and later became regarded as one of the main drivers for international trade.

Although Ricardo's theory explained the case of international trade it didn't address in a comprehensive manner the reasons behind differences in transactions volume between different agents. This gap was filled by the Gravity Model of Trade used by Jan Tinbergen in his work 'Shaping the world economy; suggestions for an international economic policy'. The model predicts trade flows between two agents based on the economic size and distance between them.

Another important theory that many later works were based on is the transaction cost theory. Developed by Ronald Coase, it claims that internal costs of operations can be lower than

external ones due to a number of reasons (level of control, risks, opportunistic behavior of suppliers, unpredictable market conditions, high interest rates etc.). This encourages firms to integrate and internationalize (Coase 1937).

Later, more theories of international trade and internationalization were developed. The most important ones are the Location theory, Heckscher-Ohlin model, behavioral theory of the firm, Uppsala model and bargaining power theory. Location theory says that the main reason for internationalization is maximization of profits due to choosing more favorable locations. The Heckscher-Ohlin model can predict trade flows and production in particular regions. It was created by Eli Heckscher and Bertil Ohlin when they expanded Ricardo's comparative advantage model and gave it a more scientific and mathematical outlook. Behavioral theory of the firm in turn referred to the physiological side of the issue arguing that a firm consists of groups (management, workers, suppliers etc.) who all influence decision-making which is based on a negotiated compromise. The Uppsala model explains the process of internationalization: first a company gains expertise in its domestic market then starts exporting to neighboring countries, later switches to more distant importers, and eventually establishes subsidiaries. Bargaining power theory assumes that there is correlation between bargaining power of a firm and its host country, i.e. companies prefer strategies with high control and, *ceteris paribus*, choose countries with lower bargaining power.

It is also very important to mention Porter's diamond model first presented in 'The competitive advantage of nations', and its later version the so-called double-diamond model (Rugman 1993). Porter's model generalizes factors that influence the competitive advantage of a firm. The factors are: 1) factor conditions (human and knowledge resources, infrastructure etc.), 2) firm strategy, structure and rivalry (rivalry challenges the company forcing it to improve and innovate), 3) demand conditions (a big and developed market pressures companies to innovate and be proactive), 4) related and supporting industries (the existence and level of development of industries that produce products and services important for innovation and internationalization), 5) government (obviously, it can influence everything) and 6) chance (uncontrollable events that can interrupt the normal structure and thus create, enhance or decrease the competitive advantage of a company). However, Porter's model didn't take into account the importance of international activities. Double-diamond model was created to fix this problem. It consists of two diamonds, one for home country, the other for host country. Complementary to it is another Porter's model referred to as Value Chain. It divides firm's activities into two main segments, namely support activities (e.g. HR, finance, etc.) and primary activities (in case of NOCs that would be exploration, refining, marketing, etc.). This framework would be especially useful for us to see

the benefits brought along by the special relationship existing between Sinopec Group, which is 100% state-owned, and Sinopec Limited, which is partially freely traded on stock exchange.

The last theory is of the utmost importance for us. It is the so-called eclectic paradigm or the OLI-Model developed by John H. Dunning in his work 'Trade, location of economic activity and the MNE: A search for an eclectic approach'. It takes into consideration the advantages of a firm in relation to its ownership, location and possible international expansion, and helps to determine the best internationalization option. One important advantage of this model is that it incorporates a variety of other frameworks and gives a good understanding of a company's competitive position and potential as well as particular recommendations on its strategy.

Igor Ansoff (Ansoff 1970) has made the next step in internationalization theory and focused on particular activities that a firm could focus on as an outcome of internal and external factors. Although his framework is devoted to growth in general, it reflects the available internationalization options very well. He developed four main options, that are market penetration, market development, product development, and diversification. We will see that Chinese NOCs tend to use employ all four options.

Researches on the general theory of internationalization are quite abundant, but studies on the more recent phenomenon, that is internationalization of firms from emerging market economies, are more limited. The rise of Japan and the Four Asian Tigers, that started in the 1950-60s, triggered the first wave of such studies (e.g., Lecraw, 1977, 1983; Wells 1983; Lall 1984), but the recent dramatic shift from socialism to capitalism in the 1980s and the rapid expansion of Russian and Chinese firms in the 2000s made the matter even more urgent.

It has been widely accepted that firms from emerging market economies are forced to quickly internationalize through brownfield investment, because their long-established rivals have secured the most lucrative assets (Ning 2009; Fan et al. 2008; Deng 2007; Buckley et al. 2007; Cai 1999). The so-called 'springboard perspective' suggests that such firms acquire strategic assets from the more mature companies 'to facilitate their propulsion to the world scene'. Seven reasons that motivate firms to apply the 'springboard move' are: **1) to compensate for their weaknesses, such as lack of experience, technology and strong brand; 2) to overcome their latecomer disadvantage; 3) to attack global rivals' foothold in their own home markets; 4) to bypass trade barriers; 5) to alleviate domestic institutional constraints; 6) to get preferential treatment offered by other/ their own emerging market government; 7) to exploit their competitive advantages in other emerging market economies** (Luo, Tung 2007). Another aspect of internationalization, that has also been paid attention to, is the strategy and its formation. Most studies on this topic (Luo, Rui 2009; Tsai, Eisengerich 2010; Child,

Rodriguez 2005; Fortanier, Van Tulder 2009; Cuervo-Cazurra, Genc 2008). Irina Mihailova & Andrei Panibratov (2012) take the next step and develop a framework that enables researchers to analyze the strategy of EMFs (emerging-market firms). According to it, the strategy should be assessed along three dimensions: macroeconomic level, industry level and firm level, with special attention paid to the government influence and firm-specific resources and capabilities. All dimensions are interconnected and should be assessed together.

All these theories complement each other and help to understand the reasons behind internationalization in general, and specific for the state-owned firms from the emerging market economies in particular.

1.1.2 Studies on state capitalism and the specific features of Chinese internationalization strategy

The second group of studies is dedicated to the issue of state capitalism and the related specific features of Chinese companies' internationalization strategy. **One needs to have a good understanding of China's economy and politics, due to the intricate relationship between the government and large businesses.** This relationship has a profound impact on companies' strategies, and is one of the most important factors defining their internationalization activity. Very illustrative indeed is the fact that in majority of cases general managers of large enterprises are also senior members of the Communist Party of China, and are therefore accountable to both the various stockholders and the ruling party. When China started to reform its economy, the first decade of the going-out policy (走出去 *zouchuqu* in Chinese) was shaped by political considerations, rather than profit-maximization. State-owned companies were the only ones allowed to invest abroad, and any foreign activity had to be checked and approved by the Government. However, this regulation was gradually relaxed. In the mid-1980s, when Chinese companies were allowed to operate abroad upon presenting the proof of possessing sufficient capital, technical know-how, and suitable foreign partners (Tan 1998). Further deregulation took place in the 2000s, when China joined the World Trade Organization, and Chinese firms were encouraged to go abroad and invest. The approval ceilings were raised (that is companies had to apply for state approval only if their activity would involve extremely large amounts of money). Chinese businesses, having accumulated cash from export, immediately followed the global trend and started to internationalize, however, the companies from pillar industries, including Sinopec and other NOCs, have remained under tight control of the State (Hong, Sun 2006).

Ian Bremmer's (2009) article 'State Capitalism Comes of Age: The End of the Free Market', highlights the fact that what the world is experiencing now is the 4th wave of state capitalism. The author claims that nowadays all major powers tend to tighten control over their economies, even the US. However, he believes that this trend's 'future will likely prove limited, particularly if it cannot provide even its two leading practitioners with a working model for sustainable growth' (p.54). 'The two leading practitioners' are Russia and China, for both of which a number of examples is given. In the end, the author concludes, that 'free market remains the most powerful and the most durable alternative to state capitalism'. According to the article, the primary actors in state capitalism are national oil corporations, state-owned enterprises, privately owned national champions and sovereign wealth funds. All these actors form a complicated net of joint businesses and related obligations, orchestrated by the government. We will observe this situation happening in Chinese oil industry with the close ties between NOCs, state-owned banks and the government.

The authors of 'Governments as owners: State-owned multinational companies' (Cuervo-Cazurra et al. 2014) take a new approach toward SOEs saying that, 'the time is ripe to revise this classical view because in many of the market economies, SOEs have undergone enormous change spurred mostly by the pro-market reforms that swept through Europe, Latin America and Asia. Although SOEs have existed for a long time, these changes have heralded the rise of a new breed of SOEs that have shed some of the shortcomings of their predecessors as they focus more intently on the global arena'. This view indicates a new approach to state-owned enterprises in general and NOCs in particular. The companies are regarded not as doomed dinosaurs, but as a new and possibly revolutionary model that combines the best of the two worlds blending it into the state capitalism phenomenon. It also stresses the fact that state-owned enterprises are stepping into international business without fear and are ready to compete with the long-established champions, exploiting the benefits that are brought along with the close ties with the government and its financing capabilities.

Although state capitalism has become a usual occurrence, each country practices it in a different way. The practice of internationalization with regards to the specific features of the Chinese state and business has been studied by Libor and Korniyenko (2008) in their work titled 'China's Investments in Russia: Where do they go and how important are they?' They argue that Chinese SOEs OFDI is motivated by three factors: acquiring advanced technology through M&As, increasing market share, and natural resource endowment. From the perspective of the Chinese government, natural resources are the primary motivator, have been responsible for 81% of loans issued for OFDI since 2002. As a growing energy consumer second only to the United

States, the country is currently dependent on oil imports — a dependence they would like to mitigate by securing their own sources. Market share gain is the second largest incentive, representing 15% of state-financed foreign projects. This type of project is dominated by Chinese power companies. OFDI for technology acquisition purposes accounts for only 4% of total OFDI, but this still represents a departure from how other ‘Asian Miracle’ countries operated. China still has a sizeable surplus of foreign currencies in an economically depressed global environment, making cheap acquisitions of Western enterprises an enticing option. One disadvantage of this approach is prompting anti-Chinese sentiment in the host countries. The U.S. Congress, for example, citing ‘national security threats,’ has blocked multiple Chinese attempts to purchase American oil companies. To the chagrin of many global players, these focuses indicate that China is not using OFDI for ‘industrial adjustment,’ or ‘efficiency-seeking.’ This article sheds light on the mechanics of Chinese NOCs’ M&A deals and what obstacles they face.

Another important study on the specific features of Chinese companies’ internationalization is Randell Morck’s ‘Perspectives on China’s Outward Foreign Direct Investment.’ It states that Chinese OFDI shows preference for countries with weak institutions. Research indicates that ‘past experience in certain institutional environments significantly predicts survival when a firm invests in another such environment’. While companies from the developed world find it difficult to operate in markets with excessive bureaucracy, corruption, low transparency, and political constraints, Chinese TNCs already have experience with such institutional features.

1.1.3 Studies on internationalization of Chinese NOCs

Literature on internationalization of Chinese national oil companies is not extensive, and primarily exists in the form of information papers and reports. They tend to focus on the motivation for internationalization and/or the role of the government. Since Chinese companies started to engage in internationalization activities about a decade ago, scholars have not yet developed a consistent and inclusive model for the new phenomenon. However, a number of studies have been conducted in order to fill the gap. Some of the most important sources of data and studies are presented below.

International Energy Agency (IEA) keeps track of all major shifts and changes happening in the oil and gas industry worldwide. It accumulates related statistics and is an invaluable source of data. The Agency publishes reports on Chinese oil companies every year and is an excellent tool to observe the long-term trends. According to one of the latest reports (IEA 2014), Chinese energy sector outward investment has grown dramatically in the past 8 years following the

financial crisis in 2008, making Chinese NOCs some of the largest oil producers in the world accounting for about 7% of total output. IEA reports also study NOCs' relationship with the government. For example, all NOCs foreign projects must be approved by the Chinese Commission of Commerce, and larger projects (exceeding \$300) require further approval of the State Council. However, NOCs have recently gone public with a significant amount of shares circulating in the market. This reflects the intricate and important relationship between the government, internationalization, profits and reforms.

Two most prominent and comprehensive publications on China's energy sector and the NOCs are 'The Strategic Implications of China's Energy Needs' (2002) and 'China, Oil and Global Politics' (2011) by Philip Andrews-Speed and Roland Dannreuthner. The first book gives a detailed description of China's energy policy, while the second publication is more business-focused and offers some valuable insights into the relationship between the NOCs and the State. Other researchers take a descriptive approach and give an overview of the NOCs international activity (Thomson, Boey 2015; Alon et al. 2015) or the misperceptions related to it (Alon et al. 2015).

Researchers have also paid attention to the motivation of Chinese NOCs to go abroad. Some of them argue that acquisition of strategic assets is the main motivation, especially for the downstream companies such as Sinopec (Lai 2014). However, they omit the fact that China's NOCs are seeking diversification and downstream companies are growing increasingly active in the upstream sector which requires more natural resources. Others stick to the traditional set of OLI framework's 'market, resources, efficiency, strategic asset/capability' types of motivation (Xu 2011). Altogether, most researchers tend to agree on the list of motivations for the Chinese NOCs to spread their activities abroad. However, not enough attention has been paid to the specific way they do it. This could be caused by the time lag, since active internationalization and expansion has started after 2008, when Chinese NOCs emerged as one of the players who had cash and desire to spend it.

Chih-shian Liou (2009) in 'Bureaucratic Politics and Overseas Investment by Chinese State-Owned Oil Companies: Illusory Champions' looks at the obstacles that Chinese NOCs face due to the complex nature of oil business and its ties to the so-called oil diplomacy. It takes the NOCs a lot of skill and effort to successfully navigate between the short-term and long-term interests as well as government directions and monetary considerations.

Researchers have also been exploring the role of various internal and external factors in determining NOCs' internationalization strategy. 'China's Global Equity Oil Investments: Economic and Geopolitical Influences' by Wojtek M. Wolfe and Brock F. Tessman (2012)

explores various external political, economic and institutional factors that shape Chinese NOCs foreign investment policy. They analyze oil-rich countries one-by-one assessing each along a list of parameters that help to determine whether they are of interest to the Chinese NOCs and to what extent. Another view on the same issue is presented in Chen Shaofeng's article 'Motivations behind China's Foreign Oil Quest: A Perspective from the Chinese Government and the Oil Companies'. The author looks at the internal factor of cooperation between the government and the NOCs, discovering the underlying motives and reasons for particular moves in China's energy policy and consequently NOCs international strategy. Mr. Chen stresses the benefits that such co-operation brings and generally speaks in favor of it.

1.1.4 Summary and research gap

The general process of internationalization has been studied quite well, however, internationalization of state-owned companies from strong-state countries is a relatively new phenomenon. Chinese NOCs are some of the most actively internationalizing state-owned companies in the world and present an extremely interesting object of study, due to the scale and scope of their operations, complicated relationship with the government, and struggle to secure both profits and diplomatic victories.

Researchers have studied relationship between the NOCs and the government, generally coming to the conclusion that the government owns, but does not run the companies. Motivation behind NOCs' international activity has been studied quite well, but most works fall within the existing frameworks limited to identifying motivations. At the same time, they tend to be outdated and focus on activity in the downstream sector without paying enough attention to the upstream sector of the oil industry. The 'market-, resource-, efficiency-, strategic asset/capability-' seeking motivation framework proves its validity and is widely applied to the Chinese NOCs (Dunning 1998; Dunning, Lundan 2008). On the other hand, these four types of motivations cannot fully reflect the strategy, since they do not include the incentives given by the internationalizing firms to their partners and potential objects of M&A.. **Thus, it can be stated that no attempts have yet been made to interconnect the motivations, incentives, relationship with the government, and data on particular cases of alliances, JVs and M&As, to generalize and describe the patterns in internationalization strategy of Chinese NOCs. This makes the studies incomplete and inapplicable to real-life situations, when strategic managerial decisions must be based on a combination of factors.**

To fill in the research gap up, an attempt will be made to answer the following question:

What are the internationalization strategies of Chinese NOCs, and what factors determine them?

1.2 Research question and objectives

The goal of this study is to identify and generalize the experience of planning and implementation of internationalization strategies among Chinese national oil companies to improve the internationalization strategies for the industry in general and Russian national oil companies in particular. To attain this aim we will pick the largest Chinese oil company Sinopec Limited and its parent company Sinopec Group, which could be representative of the industry.

The questions that will be answered are as follows:

- 1) What are the internationalization strategies of Chinese NOCs?
- 2) What factors determine these strategies?

There are several reasons that contribute to the importance of study on the internationalization strategy of Chinese NOCs. First of all, the size of these companies and the scope of their operations produce a profound impact on the industry and the world economy. Their increasing internationalization efforts have multiple directions and presently can be observed on all continents.

Second, there exists a number of misconceptions about Chinese NOCs caused by their unique features. General studies on the internationalization of emerging-market firms are unable to address the complex nature of Chinese NOCs and their international activity.

Finally, Chinese NOCs started playing a prominent active role in international business a decade ago, and the related managerial studies are incomplete due to the time lag. The importance of the phenomenon suggests that more up-to-date studies should be conducted.

The research questions are aimed at fulfilling a few objectives. The first question implies generalization and categorization of internationalization strategies, as well as preceding analysis of particular cases and tools of internationalization. The second question requires defining the factors that shape the strategies and the resulting causal relationship.

Several objectives have been identified in order to answer the abovementioned questions:

- 1. Draw up a representative case list illustrating attempts of Chinese national oil companies (NOCs) to internationalize**
- 2. Use the multiple case analysis to develop the internationalization theory:**
 - 2.1 to structure the internationalization strategy**
 - 2.2 to develop an algorithm of its formulation**
- 3. Identify the internationalization strategies of Chinese NOCs**

4. **Create a framework to develop internationalization strategy for national oil companies on the basis of Sinopec Group and Sinopec Limited multiple case study**
5. **Identify the internationalization activities of Chinese NOCs that could be adopted by Russian companies**

1.2.1 Research strategy and the structure of the study

This paper is structured with the use of abductive approach with a literature review in the beginning and an extensive multiple case study following it. Hypothesis is not formulated until the analysis of the cases has been carried out. This allows us to refer to the theory presented in the literature review, and explore the multiple cases in an unbiased and thorough manner.

To conduct our study, we have chosen the **qualitative explanatory multiple case study methodology**. This is the only methodology that would allow us to study NOCs strategies in their contexts and complexity, going deep into each case and extracting its essence (Yin 2006, Stake 2013). We believe that a national oil companies' strategy is driven not just by financial indexes and reports, but also by global political and social environment. The method also enabled us to deconstruct and analyze the essence of each case, and eventually generalize the internationalization strategy (Hancock and Algozzine 2006).

To make the research as complete as possible, multiple cases were used to reflect all possible ways of internationalization. Cases of strategic alliances, JVs and M&A deals are presented in the third chapter of this study. The findings will be tested against data on CNPC, second largest NOC in China, to verify the results.

1.3 Summary of Chapter I

Active internationalization of Chinese national oil companies is a recent phenomenon with great implications for the industry and the world economy in general. Having become the largest net oil importer, China is becoming one of the largest oil producers, and this is to a large extent done through the internationalization activity of its NOCs.

The process of internationalization has been studied thoroughly. However the recent trend of actively internationalizing state-owned companies with governmental backing deserves special treatment, due to its scale, scope, and unusual traits. Chinese NOCs, being some of the largest state-owned companies in the world, present a particularly interesting case. Their motivation to go abroad is generally well-understood and has been well-studied. But apart from the motives, there is also execution and results. Combining the three, one can see the complete picture and generalize the strategy of Chinese NOCs.

The unique structure of China's oil industry has facilitated the research. Out of three largest oil companies run by the same commission within the Communist party of China, one is too small and the other two are very similar. This allowed us to narrow the research to Sinopec Limited, the company that has the largest revenues and is the most actively internationalizing NOC, and its parent company Sinopec Group controlled solely and directly by the state. Based on the analysis of multiple cases describing the international alliances, JVs and M&A deals of Sinopec Limited and Sinopec Group, we will be able to categorize and generalize the internationalization strategy of Chinese NOCs.

Chapter II. Methodology and theoretical study of Chinese NOCs' internationalization strategy

2.1 Determining the object of the study

China has vast oil and gas reserves. At some point back in the 1980s the PRC exported oil to Japan, but then domestic demand started to grow at a much faster pace than production. Finally in the early 1990s China became a net oil importer and remains in this position until today. Although China is world's 4th largest oil producer, most of its oilfields have reached their peak and the efficiency is gradually declining.

In spite of the recent economic slowdown, China's expected growth rate for the next few years is still impressive. At 6% growth per annum demand for oil and gas will continue to rise, and as domestic traditional oil production is starting to shrink, three options are available. Oil companies can increase production of nonconventional hydrocarbons (the most promising one being resources trapped in shale), increase imports from other countries and thus expose themselves to various risks, or shift toward alternative sources of energy. The last option doesn't seem feasible in the short- and medium-term due to the extremely high switching costs, high investment and relatively low efficiency when compared to the conventional sources of energy. We can therefore consider the first two options.

The key global players in oil industry are NOCs and a number of big private, publicly traded international oil companies (IOCs) called 'supermajors'. Chinese NOCs have been cooperating with these companies for decades, both domestically and internationally. This collaboration has intensified in the late 1990s and early 2000s, reaching unprecedented levels in late 2000s due to China's economic progress, market reforms, growing concerns about energy security and large currency reserves. Besides, in the last decades many companies have reached the point when it is often too expensive or too risky to explore and extract oil on their own, so they started to form alliances that sometimes resulted in mergers and acquisitions.

Today's oil & gas industry in China is dominated by three major companies, namely China National Petroleum Corporation (CNPC) and its traded arm PetroChina, Sinopec Group and its traded arm Sinopec Limited, and China National Offshore Corporation (CNOOC). **The first two are similar in organizational structure, size and position, and operate in both upstream (exploration and production) and downstream (refining, marketing and distribution) sectors, while the last one focuses on upstream activity is significantly smaller in size and revenue.** Sinopec Limited is the largest oil company in China by revenue (\$440 billion in 2014), while its parent company Sinopec Group is one of the most active players in the

fields of international alliances and M&A (Sinopec Annual Report 2014). Sinopec Group and Sinopec Limited have historically focused on the downstream sector of oil production and started to actively internationalize earlier than other major Chinese NOCs. In the mid-2000' the company had a greater need to go overseas in order to level its downstream operations with inputs, that is to have more crude oil to process. Sinopec Group and its traded subsidiary Sinopec Limited, which is the largest NOC in terms of revenue, are internationalizing the most actively among the three and thus are the most representative companies to study. Its operations and strategy are similar to and aligned with those of CNPC and CNOOC, and by focusing on Sinopec Group and Sinopec Limited, we will be able to make generalizations for the whole industry.

A total of over 100 major deals with foreign governments and companies have been signed by Chinese NOCs from 2002 to 2015 (International Energy Agency 2012, 2015). Sinopec Group and/or Sinopec Limited have participated in over 30% of these deals, the rest spread between CNPC/PetroChina, CNOOC and other less significant companies. Out of 100 deals, about 10 can be referred to as mega deals (worth about or over \$5 billion); Sinopec took part in 5. The scale and scope of activity of Sinopec Group and Sinopec Limited, as well as their background almost identical to that of CNPC and PetroChina, allow us to narrow down the research on the internationalization strategies of Chinese NOCs to these two companies.

The cases represent all regions where the Chinese NOCs are most active, and have a highly representative nature due to the scale of investment involved. Out of 100 major deals, about 30% were related to the Middle East (3 cases out of 8 contain information on operations in this region); 25% of deals were made in South America (3 cases involve companies from South America); 15% were made in Africa (1 case); 10% in North America (1 case); 5% in Russia (1 case); the rest spread across China and its nearest neighbors (2 cases).

We shall look into major alliances, JVs, and M&A deals of Sinopec Group and Sinopec Limited, and treat them as separate cases. As a result, we shall have a detailed list of their internationalization efforts in the last decade, categorize them and draw conclusions on the company's strategy. Generalization of the strategy as well as implications for the whole industry will follow.

2.2 Multiple-case study methodology justification

Uniqueness of Chinese NOCs is rooted in their size, behavior, and relationship with the government. The vast number of factors that influence their internationalization activity makes the study of their strategy quite a challenging task. The importance of context and in-depth study of various factors and conditions have determined the methodology of this research.

The research method employed throughout the thesis belongs to the qualitative type, which allows the cases to ‘unfold naturally’ (Patton 2001). The results produced with this method ‘cannot be obtained by means of quantification’ (Strauss, Corbin 1990). One of the ways to study a phenomenon is to observe it in a number of separate events, and then record the process and outcomes. These are the characteristics of a multiple case study, when different ‘stories’ are recorded and compared to one another. However, observation and recording of outcomes is not yet a research, since a research must include analysis and conclusions, an explanatory part. This part implies a constructivist approach that is based on individual understanding as well as on the facts from the cases. However, it does not exclude objectivity, since the method makes use of pluralism and the broad variety of sources, which is unattainable with other methods (Miller, Crabtree 1999). Ultimately, the qualitative method used ‘is great for understanding the world from the perspective of those studied; and for examining and interpreting the processes’ (Pratt 2009).

Still, a question arises: how to reach objectivity and extract facts that a weighted and logical analysis could be based on? Main challenges, that a qualitative multiple-case research faces, are the validity and the value of its results. The value lies within the analytical generalizations that it can bring along (Yin 1994). Although we cannot extrapolate the results to other cases, we can generalize the trends by observing a large number of cases. The validity of research depends on the framework used to show the connection between the variables and outcomes (Eisenhardt 2007; Yin 1994) as well as give a ‘thick’ description of the case. The latter can be achieved by addressing various sources documenting details and verifying them against each other. Creating a good framework is a more challenging task.

We have come up with a list of parameters to assess the cases and pull out the necessary uniform data. The parameters making up the framework are essentially the variables that change in separate cases. The distinguishing feature of these variables is that they are clear, accessible, different in different cases, compatible and comparable to each other. The list of parameters we have chosen is as follows:

1) *Location (where the internationalization activity is taking place)*

This parameter provides us with an understanding of geographical distribution of the internationalization activity. Linked with the type of activity, its scale and scope, and other variables, it is one of the most important parameters to generalize the strategy.

2) *Date (when the activity started and/or ceased)*

Formation date adds the temporal dimension to our study, helping to track the changes in internationalization strategy.

3) *Goal of activity (what was the announced goal of activity)*

The announced goal of activity provides us with an understanding of the reasons standing behind it. Discrepancies between the announced goal and the actual outcomes can provide further information on the actual goals and objectives.

4) *Key activities (what the company and its partners were supposed to do and actually did/are doing under the agreement)*

This parameter allows us to look into the essence of each activity and draw parallels between separate cases.

5) *Ownership structure (who controls what)*

Ownership structure reflects the position of the company within an alliance and may reveal its attitude toward potential risks.

6) *Benefits (how did the companies engaged in the deal benefit)*

Documenting the benefits is of utmost importance for achieving validity of the analysis. To see what each side of deal gained is to understand what incentives were present. This reveals not only what the Chinese NOCs wanted to get, but also what they were ready to give away. This parameter reflects the bargaining process and the trade-offs of each activity.

7) *Risks (what risks the parties involved undertook)*

This parameter is useful to assess the risks involved in each activity and NOC's readiness to take them.

8) *Motives and growth options*

According to the literature review, four main types of motives can be identified: resource-seeking, market-seeking, efficiency-seeking, and strategic asset/capability seeking activities. Growth options categorized according Igor Ansoff are manifestations of the organizational strategy specific to each case.

9) *Factors*

Important considerations that give a deeper insight into the deal.

Based on these parameters we could assess, compare and analyze individual cases of internationalization activity of Sinopec Group and Sinopec Limited and eventually determine the high-level plan that stands behind them and the key factors that define it. To make the contents and the results of our research more accessible, we have put the most important details into a table (see Table 1), and concluded it with notes and prognosis for each studied case. Table 1 may serve as a reference list, if the reader wishes to trace the logic of the research, verify the data or use it to draw up his or her own conclusions.

2.3 Validity and reliability of the research

A qualitative as well as a quantitative research is considered contributing to the research field if it complies with a number of criteria, that is internal validity, external validity, construct validity and reliability (Golafshani 2003). Some scientists argue that reliability is a characteristic that can hardly be attached to a qualitative research, because it is hard to test the quality of its data and results. Still, transparency of the research can increase its reliability, because it allows others to repeat the process (Mariotto et al. 2014). Detailed description of each case and the accessibility of collected data contribute to the transparency of this research and enable it to reach a certain level of reliability.

Internal and construct validity depend on a consistent causal structure and the presence of a clear chain of evidence respectively (Mariotto et. al 2014). The framework used to assess cases and consistent with the extensive theory described in the literature review increases both internal and construct validity. The framework enables the reader to trace the logic of the researcher and explain the causal connections between variables and outcomes.

External validity is the greatest challenge for a qualitative research, because the statistical generalization it requires is hardly achievable. However, in this thesis the number of cases is relatively high, which helps to increase the validity (Mariotto et. al. 2014). Moreover, the results

of the research centered on Sinopec Group and Sinopec Limited are tested against data for another company, namely CNPC. This helps to increase external validity even further.

2.4 Limitations of the research strategy

The unique nature of cases lead to what is considered to be the main drawback of a qualitative research, that is ‘the inability to provide a basis for the generalization of results’ (Mariotto et al. 2012). It is hard to extend the findings to a wide population of cases. This problem is quite severe in case of this research because only one company is studied. This is compensated for by the representative nature of the company, the large number of case selected and the test of results against another company.

Another problem is the challenge of presenting the findings in a clear and accessible way, so that the reader could see the significance and the contribution of the research (Pratt 2009; Strauss, Corbin 2003). To overcome this obstacle, we have attempted to present the research process in a structured table with parameters that have been previously justified and explained. This shifts the qualitative research toward the quantitative pole and increases the significance of the findings.

Finally, the data used to describe the cases is somewhat limited. Although extensive data has been collected from analytical papers and business magazines (International Energy Agency, World Trade Organization, Bloomberg, Wall Street Journal, etc.), as well as from databases (Thomson Reuters, Bloomberg), the sensitive and politicized nature of the chosen subject means that some details may have not been disclosed.

2.5 Summary of Chapter II

The object of this research was identified as the internationalization strategy of Chinese NOCs. The unique nature of oil industry in China facilitated the work because one of the three largest companies is significantly smaller than the other two. The remaining companies, namely CNPC with its traded subsidiary PetroChina and Sinopec with its traded subsidiary Sinopec Limited, are similar in size, revenue and are governed by the same state commission SASAC. To narrow down the research, the revenue and the level of internationalization activity were taken into account. As mentioned above, out of 100 major deals with foreign governments and companies signed by Chinese NOCs from 2002 to 2015, over 30% involved Sinopec Group and/or Sinopec Limited, and out 10 mega deals (worth about or over \$5 billion) Sinopec took

part in 5. As a result, Sinopec Group and Sinopec Limited have been chosen to represent Chinese NOCs.

Internationalization strategy can have multiple dimensions, and separate activities aimed at internationalization require a detailed in-depth study that takes into account contexts specific to each situation. This causes the need for a structured analysis of multiple cases describing internationalization activity.

To increase the validity and reliability of research, multiple cases were selected, covering a wide geographical and typological range. Furthermore, the results of the research are tested against data for the other major oil company, CNPC. To make the logic and results more accessible, all important details from all cases were presented in a table structured according to certain parameters, that have been justified and selected based on theory presented in the literature review.

The qualitative nature of the research imposes a number of limitations onto it. However, they are all addressed to and dealt with throughout the study.

Chapter III. Empirical study

How to read the cases

Cases are grouped by regions of activity. E.g. a total of two cases involve Saudi Aramco, a company from Saudi Arabia. One case describes a JV that operates in Saudi Arabia and can be found in the Middle East section, while another case is about a JV in China, and should be looked for in the Asia section.

Each case starts with a brief introduction titled '**Background**', to provide insights into the political, economic, and social environment surrounding the deal. Often, motives for Sinopec Group or Sinopec Limited to undertake particular actions and factors that shape the company's strategy can be found in this introductory part.

To help reader get a yet better grasp of the deal, information on the **partner company** or companies is provided in second part. It helps to see the internationalization activity manifested in the deal from a different perspective, i.e. from that of a foreign firm. It also complements the 'Background' part and is useful for deeper understanding of the motives and factors driving the activity.

The third part named '**The Deal**' contains essential information on the outcome of the activity: structure of the JV, price paid for an acquisition, institutes that helped to finance the deal, etc.

'**Opportunities and Threats**' provide author's vision of the deal's future that is based on the information presented in the case.

The last part titled '**Summary**' reviews the case and suggests an internationalization strategy presented in it.

It is important to pay attention not only to the foreign firm or the internationalization activity itself, but also to the Chinese agent, since cases involve either Sinopec Group, which is a 100% state-owned firm, or Sinopec Limited (or simply Sinopec), which is partially traded in stock exchange. **The name of each case contains the name of the Chinese agent.**

Lastly, to facilitate the task of testing the final results of the analysis, each case is followed by a short summary of a similar case that involves another major Chinese NOC, **CNPC** and/or its traded subsidiary **PetroChina**. The only exception is the first case describing the strategic alliance between Chinese NOCs and the Development Bank of China, since it was more logical to include the deals of both Sinopec Group and CNPC into the body of one case.

Case 1. Strategic alliance with China Development Bank (Sinopec Group and CNPC)

Background

Chinese state-owned banks are an invaluable source of capital for Chinese NOCs. These banks provide money at low rates and cooperate with the companies during their international operations. One of the most important banks for NOCs is China Development Bank (CDB) that is often engaged in loan-for-oil and loan-for-gas projects. These deals are popular with other developing nations that lack infrastructure or need cash, but are not able to raise money internationally due to bad credit rating, slow growth, or sanctions. Venezuela, Brazil and Russia are among the countries that have worked with CDB. In this type of deal, loan is provided directly to the international partner who in turn agrees to sell oil at market price to the bank's Chinese partner. After oil or gas reach the Chinese company, it deposits money on CDB's account that withdraws a portion of payment for itself to cover the interest and gives the rest back to the international partner. This way, the bank can be guaranteed secure and timely payment, while the NCO gets a good leverage during negotiations.

China Development Bank (CDB)

CDB is a 100% state-owned bank. Its activity is centered around profiting from China's foreign and domestic policy objectives, such as strategic infrastructural change or energy security, which is crucial for China's economic development and stability. The bank was created in mid-90' to supply the pillar industries with cash. Back then the aim was to break the bottlenecks in transportation and energy, which was triggered by the economic growth of the 80' and 90'. In 2000' central government got concerned with shortages of natural resources including oil. This was also the point at which Chinese NOCs started to internationalize, initially to secure resources for China abroad. CDB followed the national champions and actively engaged in their overseas operations. Without this source of relatively cheap capital and the trust rooted in the fact that both NOCs and the bank belong to one 'club', internationalization of neither the oil companies, nor the CDB would have been possible.

The deals

China Development Bank and NOCs are part of a strategic alliance that secures profits for both the financial institution and the oil companies, at the same time fulfilling China's foreign policy objectives. The scheme, widely referred to as 'loan-for-oil', has been implemented in dozens of deals around the world, but almost exclusively in developing nations that experience

financing difficulties. Two of the largest deals include the deal with Rosneft and Transneft, Russia worth \$25 billion, and the loan given to Petrobras, Brazil that amounts \$10 billion.

In the first case, China Development bank issued a long-term loan (25 years) to Rosneft in 2009. The Russian company has to deliver a certain amount of oil annually to its Chinese counterpart (CNPC), while CNPC deposits the payment in CDB. CDB conducts checks and keeps the money that constitutes the interest payment, and only then transfers money to the crude oil producer.

The second case is more recent and involves the troubled Brazilian NOC called Petrobras. The company was close to collapse with its debt to various creditors totaling over \$20 billion, when CDB offered a \$10 billion loan in exchange for oil supplied to Sinopec Group for a number of years. Petrobras accepted the terms and entered the 'loan-for-oil' agreement. Brazil, known for the relatively rigid rules for foreign companies working in its oil industry, also agreed to give preferential treatment to Chinese service firms when choosing partners for construction and development.

Opportunities and threats

The strategic alliance between CDB and Chinese NOCs has both political and commercial objectives. First of all, it gives CDB opportunity to find clients and expand internationally. Oil-exporting countries with non-diversified economies find themselves indebted when the prices go down. At the same time they tend to rely heavily on the exports of a single commodity, and the risk of giving up this business, especially when it is now financially tied to a single customer, is very low. This partially explains the very low non-performing loan rate of CDB that is about 1.2%. The NOCs, in turn, have their transactions secured, oil supplies guaranteed, and receive an additional leverage when dealing with foreign partners. Ultimately, this helps China tie oil producers to its finance and market, thus fulfilling the political agenda.

The main threat is the volatility in oil prices that leads to the lengthy process of renegotiation. To mitigate the risks, oil companies agree to use the current market prices in their transactions, except for when the volatility gets too rough.

Summary

Deals involving the alliance between CDB and NOCs present a unique case of unity between state finance, government (which provides the political agenda) and oil companies, that are at least partially commercial. Significant loans are given to developing countries with strong state that do not allow foreign firms own strategic assets, but possess enormous resources.

Chinese NOCs can extract oil in other countries through JVs and even wholly-owned subsidiaries, so why do they engage in financing the troubled companies? In case of Russia, one of the reasons may be geographical proximity and possibility to directly transport oil to China. In case of Brazil, geographic considerations do not seem to work. However, we know (and shall see further) that Brazil possesses some of the largest oilfields in the world that could secure uninterrupted supply for many years to come. Besides, China can afford lending money at low rate which looks especially ‘heroic’ when other players withdraw. One can speculate that such behavior may bring political benefits in the future. In fact, Brazil has already promised to give preferential treatment to Chinese service companies as part of the deal, and this may prove to be only the beginning.

Middle East

Case 2. Yadavaran field deal in Iran (Sinopec Group)

Background

Political and economic ties between China and Iran date back to the early 1970s, when official relations were established, and China started buying hydrocarbons from the Middle Eastern country. Today, trade between the two countries is based on oil import to China and consumer goods/gasoline import to Iran. The latter is heavily dependent on China, because about 30% of export goods go to that country.

Iranian oilfields cannot be owned by foreign individuals or companies, but several specific investment schemes have been established in order to attract foreign cash and develop the Iranian oil industry. Almost all schemes include some sort of buyback, wherein investors supply facilities for production in exchange for the products that are then produced. After a number of years and upon completion of the buyback process, the facility is transferred to the Iranian government. Recent trends, however, point towards a more liberalized approach to investment, and most probably foreign companies will be allowed to eternally own and operate oil facilities independently or with an Iranian partner (Economist Intelligence Unit).

NIOC

National Iranian Oil Company (NIOC), Sinopec’s partner in the Yadavaran field deal, has the 2nd largest proven oil reserves in the world (about 10%). It also enjoys exclusive rights to explore, extract, transport and export Iranian crude oil. The company is a monopolist and has unlimited control over Iran’s pillar industry. Currently, it is the 3rd largest oil company in the

world, after Saudi Aramco and Gazprom. The sanctions imposed on Iran over its nuclear program, have hit NIOC, causing investment shortage and decline in the number of customers.

The deal

Yadavaran Field is a large oil field located on the border with Iraq and co-owned with it. In December 2007 NIOC and Sinopec formed a joint venture with 51% belonging to the Chinese party in order to jointly develop the site and extract oil. The Chinese party invested over 2 billion dollars. China has been diversifying oil supply for more than two decades and access to the immense Iranian resources could be a crucial step for enhancing national security.

Sinopec Group's 'brother' from the SASAC-managed 'family', CNPC, had created a number of joint ventures in Iran before, with some being unsuccessful (Iran terminated contract for joint development of South Azadegan Field due to CNPC's repeated delays on the project). Still, as all Western companies withdrew from Iran following the sanctions imposed on the country, Chinese companies have become dominant foreign actors in the country's oil & gas industry. However, they did not show enough commitment and scaled down their activity in the country in the beginning of 2010s. Now as the sanctions are being uplifted, Chinese companies fear revenge for their indecisiveness, because European companies are coming back and their service level is generally much higher. To compensate for the possible complications, Sinopec Group is starting to actively pump oil at Yadavaran, with the output already reaching 80,000 bpd.

Important considerations

The joint venture between Sinopec and NIOC illustrates how closely hydrocarbon alliances are tied to politics. NIOC with its enormous resources was desperate to channel more financial resources and technological know-how into its oil industry and increase its market share. At the same time, the Iranian NOC needed a stable uninterrupted demand. Since the EU and US could not be considered as safe options anymore, Chinese companies have become the only viable opportunity. The timing was good, because Sinopec Group is constantly searching for more suppliers, over whom they could exercise a higher degree of bargaining power. For Sinopec Group, the Yadavaran deal was clearly a resource-seeking move. The company acquired rights to jointly develop one of the largest oilfields in the world, and currently controls the JV. The political factor, however, has slowed down the process, with almost no activity in 2010-2014. As soon as it was announced that the sanctions may soon be uplifted, Sinopec Group renewed its activity to start producing more ahead of the change in political environment which would bring more international oil companies into the game.

It may seem that the alliance may turn out unstable. Sinopec Group's delays signal that the US and EU political guidelines are something that the Chinese cannot ignore, and the situation may repeat. Zhuhai Zhenrong company, a refined oil products exporter, was sanctioned by the US for exporting gasoline to Iran, although the company claimed it never had done so. At the same time, Beijing signed a deal with Tehran in 2011, that gave Chinese companies exclusive access to several Iranian oil fields, Yadavaran being one of them. In exchange, China promised to treat foreign military intervention into these territories as attacks against its own sovereign land. This is an evidence of the ongoing political and military alliance between the two countries, despite the bad relationships with the West.

Opportunities and threats

Chinese companies were the only ones who kept dealing with Iran when the international oil industry literally pulled out from the country. This helped Sinopec secure a lucrative contract over a huge oilfield, and even have the majority of shares in the JV. The \$2-billion investment as well as readiness to intervene militarily on Iranian soil in case of immediate threat to the project, demonstrate how seriously Chinese companies regard the potential of their projects in Iran.

Low cost of extraction (\$12 vs \$9 in Saudi Arabia), the huge and relatively stable market and good relationship between the two countries, have made the Iranian projects of the highest priority for Sinopec. It can increase its market share, secure access to cheap oil, diversify portfolio of Middle Eastern partners.

On the other hand, neither Sinopec Group alone, nor its Chinese 'brothers' are able to provide the money and technology needed to take the Iranian oil industry to the next level. This is why the uplifting of sanctions and inflow of Western IOCs with superior technology and managerial capabilities, is a serious threat for Sinopec Group. Iran has recently announced that it would increase oil production to over 4 million barrels/day, and none of the Chinese companies are able to support such an increase. Although politically stable, Iran has tense relationships with many of its neighbors, including Saudi Arabia and the UAE. Both countries are part of OPEC, US allies in the Middle East and Sunni-dominated societies. This make the threat of political and even military conflict and the resulting disruptions and sanctions quite high.

To curb the threat of newcomers, Sinopec Group has been trying to form barriers to entry by pumping more oil and increasing its involvement in Iran. However, as long as investment stays at the present level, and technological know-how Sinopec Group brings in is not up to the IOCs standards, the threat will keep rising. As for the threat of political and military conflict,

China has been trying to leverage Iranian influence in the region by creating a military alliance and pumping money into the country's economy.

Summary

Sinopec Group invested 2 billion dollars into a joint upstream oil venture in Iran which it now largely controls. Foreign companies are not allowed to own or solely explore natural resources in Iran, therefore the JV form was used. However, the size of investment, Iran's hunger for cash, and the ongoing sanctions helped Sinopec secure the majority of shares. The country, although having a strong state, was in no position to dictate its terms, and Sinopec managed to exploit the situation.

Sinopec Group benefited from the lack of competition in the 2010s, and had backing from the China's government, that allied with Iran both politically and militarily. Sinopec Group was somewhat sensitive to the political factor and stopped its activity when the sanctions imposed on Iran over its nuclear program were the toughest. However, the activity never stopped completely, and Sinopec along with Zhuhai Zhenrong (state-owned oil trading company) are now Iran's largest crude oil buyers.

Both commercial and geopolitical factor play a significant role in this case. Sinopec Group is successfully using the opportunities presented by the Iranian oil industry, however the threat of new entrants is growing. To curb it, Sinopec Group has been trying to create barriers to entry, but the current investment level and the know-how that the Iranians could acquire through technology transfer are not enough to keep IOCs away from the lucrative market.

Finally, Sinopec Group's strategy in Iran is resource- and market-seeking, since its activity does not include construction of downstream facilities and most oil extracted in Iran is then imported to the PRC and sold back as gasoline and petrochemicals.

CNPC and North Azadegan Field in Iran

The 100% state-owned CNPC has been present in Iran since mid-2000, but its best contracts came in 2010', following the withdrawal of Western companies. E.g. CNPC replaced Total in one of the deals, getting its 12.5% stake worth \$13 billion in South Pars oilfield JV with NIOC. Even more representative of CNPC's recent activity in Iran is a joint venture established with NIOC to explore the giant North Azadegan field in 2009. CNPC owns a 70% stake in the business under a buyback contract.

Case 3. Saudi Aramco and Sinopec JV YASREF refinery in Yanbu city, Saudi Arabia (Sinopec Group)

Background

Cooperation between Saudi Arabia and China has been intensifying throughout the last decade reaching its high after 2010. At the moment, China is Saudi Arabia's largest trading partner and Sinopec is Saudi Aramco's largest crude oil trading partner and onshore drilling service provider (Bloomberg 2016).

The deal

A major deal was signed between Saudi Aramco and Sinopec in 2012 to create a JV refinery called YASREF (Yanbu Aramco Sinopec Refinery) based in Yanbu industrial city in Saudi Arabia. Both companies stated that they wanted to extract more value across the value chain by developing their downstream capabilities. The investment was estimated to be \$10 billion, with Sinopec having a 37.5% stake in the JV and Saudi Aramco 62.5%. The refinery was supposed to start operations in 2014, but the first shipment was made in 2015. At the moment, refining capacity of the YASREF refinery is estimated to reach 400,000 barrels/day by 2020, which makes it one the largest in the industry.

The deal represents the deepening cooperation between China and Saudi Arabia. A memorandum was signed between Saudi Aramco and Sinopec during president Xi Jinping's visit to Riyadh, which points out the importance of political factor involved in the process. YASREF's produce is distributed both domestically and internationally, with a major portion being shipped to China.

Opportunities and threats

Sinopec's JV in Saudi Arabia marks involves enormous investment, some degree of political risk, and lack of control over the business. The fact that the company agreed to the minority share signifies its willingness to expand into international downstream activity with higher margins. Opportunities presented by the deal include acquisition of a larger stake in the JV, accumulation of knowledge of international downstream operations and extraction of more value from sales in China. Processing may also allow Sinopec benefit from the crude oil price volatility.

At the same time, the majority of shares held by Saudi Aramco enables it to control the JV and may lead to an eventual takeover, which has already happened with American companies in the 20th century. Saudi Arabia's oil policy (the country's ability to influence oil prices remains

very strong) can diverge from the JVs interests that focus on increasing sales and maximization of margins and profits.

Summary

Sinopec's deal in Saudi Arabia is one the largest overseas investment projects for the company. It has multiple objectives, the main being expansion into downstream sector and extraction of more profit from the value chain. More such projects may follow, as the YASREF refinery has been operating successfully so far. At the same time, the deal is clearly aligned with the government's objective to diversify suppliers and enhance energy security, which is highlighted by President Xi's visit to Riyadh. The deal involves some degree of risk due to the possibility of takeover (Sinopec owns 37.5% of shares, because no foreign companies can hold majority in oil industry enterprises in Saudi Arabia) and diverging interests with Saudi Arabia's government. The first can be mitigated by leveraging projects involving Saudi Arabia in China, while the latter requires political communication between the largest supplier and the largest consumer of oil.

The prospects of cooperation are positive due to Riyadh's 'look east' policy and its quest for diversification of economy. Saudi Arabia needs stable markets for its oil and newly introduced petrochemicals, that wouldn't question its domestic policy, and Asia accounting for 2/3 of the country's oil exports looks like the right choice. From the political point of view, Saudi Arabia remains closely tied to the USA, because its military influence in the region remains largely unsurpassed, and China is not ready to rival the Americans.

Sinopec's strategy is multi-layered and involves vertical integration and strategic alliance, while the political factor is not playing a very important role.

CNPC in Niger

While Sinopec Group holds a minority stake in the JV refinery in Saudi Arabia, CNPC has managed to gain control over a large refiner in Niger. The company has a 60% stake in the Zinder refinery project, the rest is owned by the Niger government. Having the majority of shares allows CNPC to effectively control the venture, assigning top managers and setting up the desired HR-policy. This is done to secure operations because of the political risks present in this African nation with relatively weak institutions.

The Americas

Case 4. Repsol Sinopec Brazil in Santos Basin, Brazil (Sinopec Group)

Background

Brazil is one of the largest markets in South America and in the world, and has a long history of official relations with the PRC dating back to 1974. Brazil-China relations have reached a new level in the mid-2000s, when economic cooperation intensified. By 2009 China had become Brazil's largest trade partner and an important investor focusing on natural resources.

Today, Brazil has a relatively open oil and gas industry. Before 1997, Petrobras was the only company that could own and operate oilfields, but the barriers were uplifted and foreign NOCs and IOCs entered the country. In the 2010s, the ruling Worker's Party issued a regulation that considered offshore oil and gas reserves as highly strategic, and foreign companies operating them were forced to establish JVs with Petrobras with the latter having at least 30% of shares. It is worth mentioning that such regulations are common in South America: Mexican oil industry is dominated by only one state-owned company, and Repsol's largest asset in Argentina the firm called YPF has recently been nationalized by the government (which agreed to repay Repsol, but it declined on the grounds that the sum was insufficient). At the same time, requirements for local content in Brazil (workforce and technology) were raised, which would drive up the costs. Following the new regulations, Brazil's state-controlled giant faced tremendous financial and managerial challenges. In 2015 China Development Bank issued a \$10 billion loan to Petrobras with one of the terms being that the money would be used to purchase Chinese services and materials.

Repsol

Repsol is an integrated global energy company with headquarters in Spain. It operates in Europe, Americas, Africa, and Asia. The company is very innovative and boasts a high exploration success rate of about 38% (industry average is 20-25%).

Repsol is one the leading private energy companies in South America. It owned the largest energy company in Argentina until 2012, when the government nationalized the asset causing outcry among the shareholders and international business community. The company was also one of the earliest entrants into the Brazilian market in 1997 following the liberalization of country's oil industry. Today, Repsol holds a vast portfolio in Brazil, and after entering a strategic alliance with Sinopec and creating a JV called Repsol Sinopec in 2010, it received additional funding. This has led to exploration of some of the largest offshore reserves in Brazil.

The deal

The deal between Repsol and Sinopec was signed in 2010. The former held a capital increase of over \$7 billion, while the latter subscribed to it entirely. The resulting company is controlled by Repsol holding 60% of shares and now named Repsol Sinopec Brazil.

Additional funding that Sinopec provided was used to expand the operations and upgrade the existing technology. Brazil's oil reserves are immense, but most of them are hidden in the offshore area about 5-7 kilometers deep, beneath a layer of extremely hard mineral salts. This means that exploration and extraction of such oil is very costly and requires very good expertise as well as stable funding and political guarantees. Repsol has some of the best technologies in the field and had been working in Brazil ever since foreign companies were allowed to enter the huge South American market. Sinopec, being backed by the government, has cash and political leverage that such an undertaking would require. These considerations brought the two giants together, and the JV turned out very successful. Repsol Sinopec Brazil has discovered its first major oilfield in the offshore area of Santos basin, Brazil. Another big discovery was made in 2015. The regulations have made it obligatory for the company to operate the projects with the state-owned company Petrobras (30%). Another company that joined the exploration is Norway's giant Statoil.

Opportunities and threats

Brazil is one of the major exporters and consumers of oil, and its role in the Americas will keep growing, especially considering the closeness of Mexico's oil industry and the depleting resources in Argentina. For Sinopec, having a foothold in Brazil, means operating in a low-risk, high-potential environment with access to some of the largest consumers, the USA. Sinopec's share in the JV is quite significant, and acquisition of Repsol's shares seems to be a viable option, especially given the complicated situation in South America the company is facing at the moment (renationalization of its assets in Argentina). The operations also allow for a technology transfer that could be used to develop offshore oil in China.

On the other hand, Brazil has entered a period of relative instability and the current political environment in South America looks unwelcoming for foreign oil giants. Social situation in Brazil may deteriorate and Sinopec's efforts may be ruined just as Repsol's were in Argentina.

Therefore, the best option would probably be to keep operating as usual with attempting to take over Repsol's share. To mitigate the political risk, Sinopec should use its political

leverage provided by China Development Bank, but not push too hard, because the situation remains somewhat unclear.

Summary

Sinopec entered the JV with Repsol trading its political and financial capabilities for technology and access to Brazilian oilfields. Brazilian offshore resources are considered to be some of the largest in the world, and are located in close proximity to customers with relatively low political risk. In a few years after the JV was launched, Sinopec Repsol Brazil ended up establishing a venture with some of the largest private and state-owned companies, some of which possess the most modern oil exploration and extraction technology (Repsol, Statoil). Repsol wouldn't be able to carry out a project of this scale without Sinopec's financial leverage, while Sinopec could never explore such reserves on its own.

Another important factor that influenced the successful outcome of the project was China Development Bank's giving loan to Petrobras, Brazil's major state-controlled oil company. It promised to repay the \$10 billion loan with oil that would be sold to Sinopec. This way, Sinopec acquired political leverage over Petrobras, which must be included into any offshore project in the country.

CNPC and the Libra Oilfield in Brazil

In 2013, CNPC has won a bid as a part of consortium to explore the giant offshore Libra field in Brazil. The consortium is comprised of the state-controlled Petrobras (40%), Shell (20%), Total (20%), CNOOC (10%), and CNPC (10%). The oilfield lies beneath a layer of mineral salts and is very challenging, however, the technical expertise of the IOCs will help to overcome the difficulties and eventually reach an output of 1.5 million barrels/day, according to the Brazilian government.

Case 5. Devon Energy, USA (Sinopec Group)

Background

World economy and politics largely depend on the relations between China and the United States. First comprehensive contacts between the two nations date back to the 19th century. After the revolution in China and the long period of infighting that ended in 1949, the relations became somewhat tense, because China went the socialist way and partnered up with the Soviet Union. In the 1970s, the United States government, recognizing the importance of China's role in the modern world, finally established official diplomatic relations with the PRC, and the long story of both aligned and conflicting interests started.

One important issue between China and the United States arises from the difference between the two economic systems. US is an opened market economy that allows investment and JVs in virtually all industries, as long as the business does not pose immediate danger to national security. Chinese economy is more regulated, and no free investment is allowed in a number of strategic industries. Energy sector is controlled by the government and any deal taking place on Chinese soil requires approval.

US energy sector is run by private companies, which results in US customers paying market prices for energy sources. Chinese state-controlled companies started to make big-scale acquisitions in the mid-2000' causing concern among many Americans. However, historians and economists reminded them of the recent past when the Japanese started buying assets, importing goods, and even establishing production in the country. Eventually, when the boom ended, it turned out that the US customers enjoyed an improved competitive market, and the some of the precious assets the Japanese had bough, were being transferred back.

Devon Energy

Devon Energy is a major US company specializing in exploration and production of oil and gas in North America. It is a major shale oil and gas producer, and is listed in Fortune 500. The company was started in 1971, and has accumulated vast experience in the industry. At the moment, it holds considerable stakes in some of the US largest shale gas- and oilfields and operates them successfully using the hydraulic fracturing technique.

The deal

Sinopec Group acquired a 1/3 stake in five major projects carried out by Devon Energy in 2012. The deal worth \$2.5 billion was the second such investment by a Chinese company in the US, the first being an acquisition made by CNOOC (3rd largest NOC in China). The latter also

acquired a 33.3% stake in a number of projects belonging to Cheapsake Energy, another major private oil and gas company listed in Fortune 500.

The deal went through a smooth approval process with no concerns raised over a minority stake in a limited number of projects. According to analysts, Sinopec Group paid a 20% premium, because the market expectations were that the deal would not exceed \$2 billion. The deal was signed in 2012, when the fracturing fever almost reached its high, and the premium can be explained by Sinopec's desire to have access to the best technology. Under the agreement, the two companies were supposed to jointly explore 5 drilling sites, moving facilities from one site to the next one if the desired conditions are not found.

At the moment (2016) Devon Energy is seeking to sell off of part of its assets to lower debt in the wake of the ongoing oil price crisis. Sinopec Group, however, hasn't yet taken its chance because of the oil price uncertainty, China's economy slowdown and the 'surprisingly' high prices for the US assets.

Opportunities and threats

A joint venture with a US-based company required thorough preparation, because the Americans have blocked major deals before (CNOOC, a smaller NOC from China, has attempted to buy California-based Unocal for \$18 billion in 2005, but the deal was blocked by the US government). To keep a low profile, Sinopec Group agreed to a minority stake in the project. The deal also implied higher costs due to strong institutions related to workers' rights and environmental regulations. However, the company went on with the JV in order to get access to the strategically important technology that could be used in China for domestic shale oil and gas. A takeover of Devon's stake does not seem as a feasible opportunity, but technology transfer that will lead to Sinopec's own progress, is almost certain.

The main threat is Sinopec's lack of experience of working in North America. Cultural distance may lead to complications when it comes to legal compliance, which in turn may result in fines and reputational damage. However, the strategic importance of deal implies that the Chinese will do their best to establish a solid foothold in the highly competitive and technologically advanced North American market.

Summary

The deal between Sinopec Group and Devon Energy deserves special attention because it is the first case of internationalization in a developed free-market economy. It clearly

demonstrates that Sinopec Group can comply with the necessary regulations and operate in an environment with highly developed institutions.

At the first glance, the deal does not involve political agenda. The nature of the US energy market implies that China wouldn't be able to have any significant influence over the highly diverse and competitive industry in that country. China's partner is major Fortune 500 company, yet it is one of the many similar firms. The premium Sinopec Group paid for the minority stake hints at the reasons behind the deal. Devon Energy, being one of the earliest companies to start using hydraulic fracturing to extract the so-called tight oil and gas, has some latest drilling technology and knows how to efficiently manage unconventional oilfields. China, in turn, has the world's largest known shale oil and gas reserves in the world (more than US and Canada combined), but most of them belong to the 'tight' type and require application of sophisticated technology. Hence, internationalization into the relatively unfamiliar free US market helps to kill two birds with one stone. First, Sinopec Group diversifies its business by investing into a JV with a highly-efficient private company. Second, the Chinese can acquire technology by looking over Devon's shoulder. This technology will help Sinopec Group develop its own projects in China, which is of strategic importance for the government. Therefore, the political agenda is still present, and the interests of the company and of the government are closely aligned.

PetroChina in shale gas deal with Shell in Canada

PetroChina, a traded arm of CNPC, paid over \$1 billion for a 20% stake in Royal Dutch Shell's shale oil and gas project in Canada in 2012. The company's representatives acknowledged that one of the main reasons was technology transfer that would happen through the venture. The company could then bring the technology back to China and explore its local resources. Other considerations were the production and access to the North American market.

Africa

Case 6. Acquisition of Addax Petroleum (Sinopec Group)

Background

China first entered African oil and gas in 1990's, but Middle East remained its main supplier of hydrocarbons until 2000's. 9/11 and the war in Iraq have influenced China's decision to diversify from the turbulent region and engage more actively in expansion into Africa, despite the risks involved. The first operations were launched in Sudan notorious for its instability, and by 2009 the PRC had business in over 20 African nations.

Most of the times, Chinese companies form joint ventures with local players and IOCs to secure access to the upstream sector. Downstream activities are confined to nations that possess both significant resources and large markets, such as Nigeria, Angola, Algeria, and Egypt. Since China was a latecomer to the African oil and gas, it had to offer something that its rivals could not. To increase competitiveness, Chinese NOCs entered a strategic alliance with state-owned banks with China Development Bank as the main partner. The banks would give loans to local firms and governments without transparency or human rights requirements, unlike the IMF or other Western institutions. This fuelled corruption, but helped China gain a foothold on the continent.

However, it was relatively difficult for Chinese NOCs to compete with IOCs that had been present in Africa for decades. To overcome the problem, another tool was applied, namely acquisitions. One of the most significant ones was the acquisition of Addax Petroleum, a company that had rights to many oilfields across Africa and the Middle East.

Addax Petroleum

Addax Petroleum is an integrated oil company with international operations based in Switzerland and publicly traded in the UK and Canada. It was a part of Addax and Orix Group of companies also based in Switzerland, and became an independent company in 1994. The parent company had business all over the world, including West Africa and the Middle East. Addax Petroleum used the know-how it inherited from the Group and expanded rapidly. By the time of Chinese takeover, it accumulated extensive assets in Nigeria (since 1998, shared production agreements with Nigerian National Oil Company, various other projects, some with 100% ownership), Cameroon (since 2002, offshore sites, varying degrees of ownership, up to 70%), Gabon (since 2006, onshore and offshore, varying degrees of ownership, up to 100%), and Iraq's Kurdistan region (since 2005, joint venture with Iraqi government). Company's total daily output reached 136,000 barrels and it had more than 500 million barrels of reserves by 2009.

The deal

Addax Petroleum was going through a hard period in 2009 when Sinopec contacted the company and offered what would become Chinese NOCs' largest foreign acquisition up to date. The acquisition cost Sinopec \$8.27 billion. The company retained its name but changed the logo, and continued its operations as if nothing happened. Sinopec continued to finance the ongoing projects and even expanded their scope, especially in Iraq, where China's presence is the most significant among all other nationals. China opposed military intervention into Iraq in 2003, and

after the war ended it became largest importer of Iraq's oil (1/2 in 2013). Addax's assets were the first major foothold of Chinese NOCs in the country, and other companies followed the lead (CNPC in 2014).

Opportunities and threats

Sinopec has secured significant resources in Africa and the Middle East. They can be regarded as 'leftovers' because of the political and social instability the region has become notorious for. However, the lack of institutions may be beneficial for the Chinese, who know how to operate in such environments and can establish wholly owned subsidiaries or joint ventures with majority shares here. This will increase the stability of crude oil supply. Another important consideration is the market size of the nations where the oilfields are located. Not only will the company benefit from the supply, but it can also build more refineries and sell final products in local markets.

However, the turbulent regions of Africa and the Middle East will remain high-risk environment for many years to come. High levels of corruption, a direct result of underdeveloped institutions, can make any business unprofitable. Chinese NOCs are currently contributing to further deterioration of the situation by providing low-interest loans from CDB without requesting disclosures and transparency. Therefore, the main threat remains political instability that is a curse of almost any 'failed state'. To mitigate the risk, Chinese NOCs need to manage their financial aid and investment very carefully delivering at least part of them through secure channels that will reduce social tension.

Summary

Acquisition of a European company with extensive assets in the developing world is not an end in itself. The deal fully complies with Sinopec's strategy of direct geographical expansion into countries with weak institutions, and Chinese government's energy security policy that implies diversification of supplier nations.

Sinopec's acquisition is highly representative of the magnificent turn that the Big Chinese Business took following the world financial crisis. China's government accumulated vast cash deposits and was able to give loans at incredibly low rates. The NOCs took advantage of cheap money and low prices for high-class assets, and made a strategic move that worked both financially and politically.

Addax's portfolio looks as if it was tailored for Sinopec. Decent oilfields in African countries with relatively poor institutions – the environment the Chinese can comfortably fit in,

and Iraq, feeling betrayed by the West. China's investment in the three countries Addax has business in (Nigeria, Cameroon, Gabon) is jaw-dropping, it seems that the PRC is omnipotent and is building local infrastructure out of good will. Of course, the Chinese are getting paid, with their own money though, that is given to African nations beforehand on the condition that the capital is used for Chinese goods and services. Some argue that this is neo-colonialism, but at least the Chinese and their NOCs exercise a very high degree of bargaining power over the African nations, and it is hard to overestimate their dependence on the Asian giant.

Sinopec's loyalty to its Iraqi partner (i.e. the Iraqi government) can be observed in the low-margin agreements that the company has signed with it after the acquisition of Addax Petroleum. The fact that the Western companies were not willing to get involved in risky business without being guaranteed high returns, while their Chinese peers (CNPC purchased oilfields in Iraq from ExxonMobil in 2013) lined up for the treat, reveals the political agenda behind the deals and highlights its significance.

CNPC in Africa and Iraq

In Africa, CNPC is present in Chad, Niger, Nigeria, South Sudan and Sudan. The latter two are some of the least stable countries in the world. So far, CNPC had built one refinery in Chad, in which it owns 60%, the rest belonging to the Chad government. The refinery and a power generation station attached to it supply the country's capital with electricity and are crucial for Chad's security. CNPC's degree of participation in projects in other African countries varies, but is usually below 50% if the other company is an IOC such as Shell. When the other party is local government, CNPC usually controls the joint venture by holding the majority of shares. CNPC's involvement in Iraq has also been rather significant, but since no major acquisitions were made and the Chinese company has been a latecomer to the Middle east, most of its projects are minority-share joint ventures with IOCs, such as BP or ExxonMobil.

China

Case 7. Exxon Mobile, Saudi Aramco, and Sinopec JV refinery in Fujian Province (Sinopec Limited)

Background

Diplomatic relations between China and Saudi Arabia were established in 1990, when the Middle Eastern country already had 40 years of relations with Taiwan. Saudi Arabia is considered to be China's 'strategic partner', although the backbone of cooperation is oil (Al-Tamini 2012). Other important spheres of cooperation include aluminum, air transportation,

railroad construction and weapons trade. In most cases, the PRC provides technology and know-how to its partner.

Saudi Aramco

The only entity that owns, explores and operates oilfields in Saudi Arabia is Saudi Aramco, the largest oil company in the world and the most influential member of the OPEC. The company is owned by the royal family of Saudi Arabia, but originally it belonged to several US firms (hence the name 'Aramco' – Arabian American Oil Company), that started exploration in the beginning of the 20th century and brought in the necessary technology and know-how. United States used to be Saudi Aramco's largest partner, but the 'look east' policy adopted in mid-2000s led to China becoming the largest consumer of Arabian oil. Today, the company invests into China to create a network of refineries to process its crude oil and get closer to the market.

Exxon Mobil

Exxon Mobil, descendant of John D. Rockefeller's Standard Oil, is the world's largest supermajor (i.e. IOC or internationally owned company), although it accounts for only 3% of total oil production in the world. At the same time, it is one of the most profitable companies according to Fortune 500, and the largest oil refiner in the world with some of the most advanced knowledge and strongest brands in the industry.

The deal

The refinery in Quanzhou, Fujian province, has raised nearly \$4 billion and is the largest Sino-foreign financing project on Chinese soil up to date. The deal was signed between Sinopec, Exxon Mobile, and Saudi Aramco to modernize and triple the production capacity of the existing oil refining facility to 240,000 barrels/day (Saudi Arabia's total output is about 10 mln barrels/day) by 2009, and add a number of production units (polyethylene, polypropylene, etc.). The project was partially financed by Saudi Arabia (\$1 billion), while the rest was provided by 11 Chinese state-owned banks, including China Development Bank. Sinopec owns 50% of the JV, Exxon Mobil and Saudi Aramco each hold a 25% stake. In addition to the refinery and production, the companies also entered a marketing JV that would operate 750 filling stations across Fujian. The project is unique because it brings together the largest producer from the Middle East, the largest refiner in China, and the largest market. The companies are putting their strengths and know-how together to operate with the largest possible profit.

It is important to note that the production units of the updated refinery are able to process some kinds of Arabian oil that could not be processed before (the so-called distressed oil), which highlights the fact that the facilities were built specifically to deal with imports from Saudi Arabia.

The refinery has reached the planned output, and the JV is functioning as of April, 2016.

Opportunities and threats

Although Saudi Aramco is the largest oil exporter in the world, it finds the growing competition from other companies and unconventional oil producers more and more threatening. It is therefore trying to expand into sector. However, access to the most lucrative markets is quite limited and the deal with Sinopec and Exxon Mobile presents a very good opportunity.

Sinopec has exploited its home country benefits (market size) and attracted Arabian money and international expertise to expand its own business in China. At the same time, a JV between the largest exporter and the largest importer could add stability to the value chain and make the relations with Saudi Arabia more predictable. From this perspective, political and commercial interests are aligned with each other. Expertise from Exxon Mobil must have been an important consideration for the other two companies, since its knowledge of the downstream sector and the valuable brands it has are an invaluable asset for a refining project.

On the other hand, a big-scale deal with a Sunni-dominated country claiming leadership in the Middle East may hurt relationship with Iran, another big player in the region and a potential major partner of China in oil trade. Obviously, the political factor plays a less important role in the deal, but it could turn into an obstacle in the future.

Summary

Oil and gas being one of China's pillar industries crucial to its energy security is a relatively closed market with foreign companies not allowed to hold majority in big projects.

The creation of a JV between ExxonMobil (25%), Saudi Aramco (25%) and Sinopec (50%) was therefore the only option for the foreign companies to directly enter China. The scale of investment implies commitment from all parties, which is an evidence of good intentions of Saudi Aramco, China's largest oil supplier. Upon the completion of project, another JV was launched, only this time in Saudi Arabia and with Sinopec Group (see below). Hence, the JV in Fujian province can be regarded as a part of mutual investments made to cement the 'oil friendship' between China and Saudi Arabia. At the same time, the fact that the two companies lack expertise to produce and operate downstream facilities at a highly profitable international

level led to ExxonMobil's participating in the deal. Its importance is embodied in the 25% share, the same as Saudi Aramco's. ExxonMobil is also a long-established trusted partner of the Chinese oil industry, especially of PetroChina, CNPC's traded arm.

Through the JV, Sinopec cemented its relationship with its biggest supplier while securing supply for many years to come, gained more international-level expertise in downstream sector and opportunity to benefit from ExxonMobil's strong brand, and found investment needed to set up giant production that would increase company's market share and penetration level.

Saudi Aramco and PetroChina JV Refinery in Yunnan province

State-owned Saudi Aramco representing the top oil exporter in the world has signed the deal with CNPC's traded arm PetroChina to construct a large-scale refinery in the southern province of Yunnan, China. The deal took place in 2011, and the refinery was successfully launched some years later. The value of the deal has not been disclosed, however construction of a refinery of such scale (200,000 barrels per day refining capacity) would cost several billion US dollars. Under the agreement, PetroChina would act as an investor and a distributor of the final product, while Saudi Aramco would also invest into construction and supply crude oil under a separate long-term contract. The former holds 51% of the JV, Saudi Aramco has 39%, and the rest belongs to a local firm. The deal is very similar to that signed between Aramco, Sinopec Limited and ExxonMobil, and helps to cement the ties between the largest exporter and the largest importer of crude oil.

Case 8. Royal Dutch Shell in China (Sinopec Limited)

Background

Most IOCs in China operate in the downstream sector (Exxon Mobil, Shell, Eni, etc.), however, the recent findings that put China on the 1st place by proven shale oil and gas reserves, have attracted these companies into the upstream sector, while opening up local companies to cooperation at the same time. China does not possess the necessary technology to explore and operate shale reserves on its own and has to consider giving part of its resources 'away' under joint exploration or shared product agreements. The active phase of cooperation started in 2010' when the US shale boom proved successful. Given the stable and predictable demand for oil and gas in the local market, as well as the protectionist nature of Chinese economic system, exploration within the country looks like a sure bet for IOCs.

Royal Dutch Shell

Royal Dutch Shell (Shell) is an integrated oil company that operates in about 90 countries and covers all sectors of the oil industry. It produces over 3 million barrels of oil/day and is one of the most profitable organizations in the world. Shell's expertise in all sectors of the industry can be attributed to its long history that dates back to the beginning of the 20th century, when its first operations started in Georgia that was then a part of the Russian Empire.

Shell has been present in China since early 20th century. The company has maintained good relations with the government after the PRC was established in 1949. Its office in Shanghai remained open until 1966. In the 1980' Shell was one of the first supermajors to re-enter China.

After the US market – main focus of shale oil and gas exploration companies – became too competitive, major players started looking for investment opportunities in other parts of the world. Shell chose China because of its long history of successful cooperation with local firms, and the fact that this Asian country has tremendous unexplored proven resources.

The deal

In 2012, Sinopec and Royal Dutch Shell agreed on a shared production contract that would require the IOC to invest about \$1 billion/year into exploration of shale oil and gas in China's Western regions. The company would be get paid back by the to-be extracted oil and gas. This could then be transported to ports and shipped elsewhere or directly to Shell's JV refineries set up with other Chinese NOCs. Sinopec would exclusively operate the fields.

Shell became the first international oil company to secure a contract in China's shale oil and gas sector. Others, such as BP, Exxon Mobil, Eni, Total, etc. followed.

The deal happened the same year Sinopec Corporation's parent company Sinopec Group purchased a 1/3 stake in 5 of US-based Devon Energy's major shale oil and gas projects. This shows the NOC's appetite for shale gas projects and its eagerness to have the necessary technology.

Opportunities and threats

Clearly, one of the main drivers for Sinopec is the opportunity to get the necessary technology and share the risks of early exploration with a major foreign company. There is an industrial approach to drilling, and the learning curve applies to it as well. As soon as Shell and Sinopec drill enough probes, the Chinese company will be able to replicate the technology in its other projects, while keeping the original deal going.

On the other hand, shale oil and gas is more expensive to explore and extract than the conventional reserves, and even the slightest price fluctuations may affect the attractiveness of such ventures. This is happening now, when Shell is scaling down its originally \$1 billion/year investment and looking for other opportunities elsewhere. The risk for Sinopec is not very significant though, because under a product sharing agreement, the domestic party does not invest and pays its partner back by sharing the oil extracted from the jointly discovered fields.

Summary

Oil and Gas is one of the strategic pillar industries that the Chinese government pays a lot of attention to and generally does not allow foreign companies operate in. The recently discovered shale oil and gas reserves in China are the largest in the world, but local players do not have enough expertise to efficiently explore them. Commercial companies can benefit from extracting oil in such proximity from a huge market that also strives for energy security. Therefore, IOCs were eager to enter joint ventures with Chinese companies to secure ‘seats in the front row’. Although the political agenda behind the deal is quite transparent, the commercial factor plays the leading role, which is highlighted by the fact that the partially traded Sinopec Limited is taking part in the venture, not its state-owned parent Sinopec Group. Regarded as a ‘sure bet’, the joint venture may increase Sinopec’s value tremendously and benefit its main shareholder, the government.

Royal Dutch Shell and PetroChina

Shell and PetroChina have a number of JVs across China. Most projects involve unconventional oil and gas, which implies the use of Shell’s sophisticated technology and know-how. PetroChina holds majority stake in all projects or cooperates with Shell under production-sharing agreements.

Executive summary

Sinopec Limited was established as an independent company in 2000 and was simultaneously listed in Hong Kong, New York, London, and later in Shanghai. It received its asset base from Sinopec Group, China’s main oil refiner and distributor at that time, and focused on operations in the domestic downstream sector. Over 70% of shares of Sinopec Limited are currently held by Sinopec Group, which is state-controlled through SASAC (State-owned Assets Supervision and Administration Commission of the State Council). Other major shareholders include JP Morgan Chase & Co., Blackrock, and Schroders.

Sinopec Group and Sinopec Limited act as separate entities, however a careful analysis of the most significant deals of the two companies reveals that their internationalization strategies complement each other and can be treated as one. The same can be applied to the other major Chinese NOC: CNPC and its traded arm PetroChina, the latter formed in 1999 and granted with the bulk of parent company's assets.

Sinopec Limited obviously benefits from finance and HR activities of Sinopec Group. The companies share top management and enjoy preferential treatment from the state-owned China Development Bank, which provides loans for both them and their partners under the so-called 'loan-for-oil' agreements (case 1). Access to cheap capital is a very important resource for both companies that helps them increase bargaining power and overcome the challenges that are typically faced by late entrants into the energy sector. Finance and HR can be regarded as support activities shared by both companies across their value chains and serve as evidence of the strategic alliance existing between them.

Besides this, Sinopec Group, being the main shareholder of Sinopec Limited, provides it with political leverage. The state-owned company is directly governed by SASAC and has long-established and politicized relationship with China Development Bank. Virtually every deal of Sinopec Group and Sinopec Limited is saturated with if not driven by the political agenda. In fact, mutually beneficial relationship with the government it is a type of support activity that is not directly mentioned in Porter's value chain model, but is evident in case of Chinese NOCs.

Sinopec Group is very active outside of China and pursues an expansion growth strategy. It is present overseas in various forms and focuses on market development (cases 2, 6) and diversification (cases 3, 4, 5). The geography of its deals is spread across all continents and is concentrated in the Middle East (cases 2, 3), South America (case 4), and Africa (case 6), regions with high political risk and often very weak institutions. Sinopec Group's presence in developed markets, such as the USA, is limited by the host countries' economic and energy security considerations.

The listed Sinopec Limited is mostly active within China and almost exclusively engages in low-risk joint ventures with foreign firms to either get access to their technology or secure oil imports by establishing joint refineries that require high commitment from all parties (cases 7, 8). These kinds of low-risk undertakings in China with its monopolized oil market and huge growing demand support financial health and stability of the traded company that must take into consideration the interests of all shareholders. From the perspective of growth, Sinopec Limited focuses on market penetration (case 7) and product development (case 8).

It can be observed that the political agenda is highly important for both Sinopec Group and Sinopec Limited. The former acts on behalf of the government and secures oil supply and technology transfer in both high-risk (cases 2, 3, 4, 6) and low-risk (case 5) environments. The latter ties suppliers to local Chinese market through JVs (case 7), and develops technology that will benefit the company financially and the country politically (case 8). The two entities often engage in deals with the same foreign firms, but the cooperation is manifested in different forms (cases 3, 7).

It has been noticed, however, that the Chinese NOCs' internationalization strategy is not entirely uniform. PetroChina, the traded arm of CNPC, is active abroad as well as at home. The scope of its business overseas can be hardly compared to that of its parent company, however, it suggests that the strategy is constantly evolving and should receive sufficient attention from practitioners and scholars. Sinopec Limited has recently announced that it may purchase overseas upstream assets from Sinopec Group and turn into a major international player itself, just as PetroChina. This may bring the internationalization strategies of Chinese NOCs back to the entirely uniform state again, but will certainly require additional study.

Findings and discussion

The researched has revealed the following:

1. Both domestic and international economic policies of the PRC are the ultimate drivers for Chinese NOCs' internationalization activity. As a result, their internationalization strategies are not only tied to, but also facilitated and directed by the government. This relationship shapes the strict top-down hierarchical structure of the strategies and leads to their having a clear algorithmic nature.
2. Internationalization activity of Chinese NOCs can be split into support activities (shared HR, political facilitation, state financing and so on), which are applied to all projects, and primary activities. Primary activities of various business units differ in each case and depend on the nature of particular deals.
3. Support activities mentioned above are the key factors that shape the internationalization strategies and lead the NOCs to undertake particular projects at the business unit level. The current strategy of Sinopec Group, Sinopec Limited, CNPC, and PetroChina (major Chinese NOCs) is the expansion strategy.
4. The expansion strategy manifests itself differently in different types of deals. To describe particular modifications of the strategy, Igor Ansoff's product-market framework can be employed.
5. To attain the objectives of expansion strategy, the so-called functional project strategies are developed and implemented: production strategy, financial strategy, and some other strategies, which are not covered in this research.
 - Financial strategy is shaped at the support activities level.
 - Production strategy is shaped differently for every given type of project and includes several dimensions:
 - ❖ What entity is engaged in the deal, i.e. a 100% state-owned NOC (Sinopec Group, CNPC) or its traded arm (Sinopec Limited PetroChina), depending on the risk level (the higher the risk the more likely a 100% state-owned entity is the actor)
 - ❖ What kind of legal form does the activity take (JV with majority/minority of shares, WOS)

Detailed layout of the particular factors that are taken into consideration when the production strategy is being formed can be found in Table 1.

It becomes evident that the internationalization strategies of Chinese NOCs should be studied at two levels: the corporate level that covers support activities, and the project level that describes primary activities. This can be attributed to their specific structure, i.e. a 100% state-owned entity passes down the directives it received from the government to its traded arm, after which internationalization ‘manuals’ tailored to each particular case are developed. This approach can be applied to all state-owned companies functioning within industries considered strategic by respective governments.

China’s policy of energy security in the 1990’s has pushed local NOCs to develop outside of China, while vast cash deposits facilitated their progress. Next step was taken in the 2000’s, when NOCs established their traded arms (Sinopec Limited and PetroChina) to increase efficiency and monetize on the domestic market.

The analysis of cases has revealed that there is a strategic alliance between Chinese state-owned banks, national oil companies and their traded arms, with distinctive role assigned to each member. The alliance in general balances between political and commercial interests, with the former mostly pursued by the state-owned Sinopec Group and CNPC, and the latter driving Sinopec Limited and PetroChina.

Despite being different legal entities, all Chinese NOCs are controlled by the government through a special body that provides the ultimate agenda. This leads to their having a shared strategy that has been revealed in this study.

Oil industry can be roughly divided into the upstream and downstream sectors. The upstream sector covers exploration and extraction of oil as well as the related technology, while the downstream sector is centered on refining, marketing and distribution. It can be easily deduced that the upstream sector has more strategic significance, because oil can be used without a refinery (e.g. sold as crude or refined by small grassroots factories), but refineries cannot run without oil supply. Quite unfortunate for the Chinese NOCs, there were late entrants in the international energy market and faced the challenge of securing resources. This forced them to internationalize into the high-risk areas of the world such as some parts of the Middle East or Africa.

The combination of high strategic significance of the upstream sector and high risk of the available options define the first level of the internationalization strategy of Chinese NOCs: overseas expansion is almost exclusively conducted by 100% state-owned entities, namely Sinopec Group and CNPC. Their traded arms, Sinopec Limited and PetroChina, are mostly responsible for the less risky and well-controlled domestic operations.

Different motives for internationalization lead to a variety in geographical locations. Downstream sector implies resources as the primary motive, and leads to expansion into countries that allow large-scale extraction of strategic resources by foreign NOCs. It happens that such countries have weak institutions and high political risk (Nigeria, Cameroon, Sudan, Iraq, Iran, Russia). There, Chinese NOCs may partner up with local governments or local NOCs to establish joint ventures or even invest into a wholly owned subsidiary. The choice depends on whether the host state is strong enough to secure the majority of shares in the JV or at least not allow the Chinese to create a WOS.

Technology can also drive expansion into downstream, especially when it has to do with challenging oilfields. In this case, geography does not play a significant role, unlike the choice of partner. Major IOCs or technologically developed ‘niche’ and service firms possess the desired technology, and Chinese NOCs agree to hold minority stakes in JVs with such enterprises (Brazil, USA, Canada).

Apart from the upstream sector, downstream sector has also become increasingly important for Chinese NOCs. As a part of the expansion strategy, it allows them to diversify, i.e. refine crude oil and sell new products in new markets. The amount of resources and the market size define the choice of host country for the downstream internationalization activity (Nigeria, Saudi Arabia, Russia). Whenever possible, the NOC tries to establish a WOS or a JV with a majority stake, but the particular form depends on whether the local state is strong (Russia) or weak (Nigeria).

Domestic internationalization activity is primarily driven by technology-seeking motives. Chinese NOCs represented by their traded arms engage in low-risk joint ventures with international oil companies or service firms that can bring in the necessary know-how and transfer it to their Chinese counterparts. Another motive is the creation of a seller lock-in situation, when a major oil supplier invests into a large refinery in China and signs a long-term contract. As a result, the supplier becomes dependent on the Chinese market and takes up significant fixed costs. All JVs on China’s soil are controlled by local companies that motivate their partners by allowing access to the immense domestic market.

The summary of the strategic framework is presented in Table 1.

The framework may also help us make assumptions about potential deals in various locations, e.g. Russia, a country with significant resources and large population, but high political risk and weak institutions. Our strategic framework implies that since the deal is to take place overseas, a 100% state-owned company will participate. The potential deal would be

driven by resource-seeking or market-seeking motives, but the political and economic vulnerability of Russia implies that most probably the resource-seeking motive would take over as the more profitable option, given the weak domestic demand and the government's need for investment (see case 2 on Iran). The counterpart would be the Russian government or a local NOC, and the deal would be financed by Chinese state-owned banks, Sinopec's own capital or CDB, very likely through a loan-for-oil contract. Sinopec Group would attempt to establish a WOS or have the majority stake in the JV, but since Russia does not allow foreign companies to operate strategic assets alone, the Chinese party would have to agree to a minority share. However, the vulnerability of the Russian counterpart and the political/financial leverage would help the Chinese get a significant stake in a JV they would consider important enough.

A good illustration to the explanatory and predictive power of the resulting framework can be observed in the recent deal between Rosneft and Sinopec Group over the Russkoye and Yurubcheno-Tokhomskoye oil fields in East Siberia. The Russian company was looking for a partner to co-develop the fields in order to decrease the operational risks, and as a result a joint venture between Rosneft and Sinopec Group was established, the latter holding a significant stake, but not the majority (49%).

The framework could be further employed by Russian companies to:

- 1) Assess and predict Chinese NOCs' international behavior
- 2) Develop attractive investment projects for Chinese NOCs domestically and abroad
- 3) Develop more efficient internationalization strategies that would cover both primary and support activities and involve co-operation between state-owned banks, NOCs, and the government.

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Appendix1. Table 1 - Internationalization strategy of Chinese NOCs: the summary

sectors	international upstream		international downstream	domestic upstream	domestic downstream
environment	high risk areas with weak institutions	not applicable	areas with large resources & large market	not applicable	not applicable
political risk	high	low	low to high (depends on region)	Low	low
partners	host country government/NOCs	IOCs	host country government/NOCs/IOCs	IOCs/service companies	NOCs/IOCs
motives & growth strategy	resource seeking; market development	technology seeking; diversification	market seeking; diversification	technology seeking; product development	technology seeking, lock-in; market penetration/product development
actors	100% state-owned firm			traded arm of 100% state-owned firm	
forms	JVs with minority shares if strong-state	JVs with minority shares	JVs with minority shares if strong-state	JVs with majority shares	JVs with majority shares
	JVs with majority or WOS if institutions weak		JVs with majority shares or WOS if institutions weak		
financing	state-owned banks, loan-for-oil, own capital	state-owned banks, own capital	state-owned banks, own capital	state-owned banks, private banks, own capital	state-owned banks, private banks, own capital

Appendix 2. Table 2 - Sinopec Group and Sinopec Limited Internationalization Activity: Summary of Cases

Sinopec Group and Sinopec Limited Internationaliztion Activity: Summary of Cases												
#	(A) Parties		(B) Date	(C) Location	(D) Goal of activity	(E) Key activities	(F) Ownership structure	(G) Duration	(H) Benefits	(I) Risks (Sinopec)	(J) Motives and Growth Options (Sinopec)	(K) Factors (Sinopec)
Strategic Alliance												
1	P1	China Development Bank (state-owned)	1990'	Worldwide	Fulfilling political objectives of energy security and economic development	Joint participation in loan-for-oil and loan-for-gas deals worldwide	Strategic Alliance	Still exists	Access to market (partners of NOCs; fulfilling political agenda)	Price volatility	Strategic asset-seeking	CDB provides a springboard for Chinese NOCs and helps to tie suppliers
	P2	Sinopec Group (state-owned); Sinopec Limited (partially traded)							Reducing risks, increasing political leverage, access to cheap capital	Problems with government in strong institution environment		
Joint Ventures												
2	P1	National Iranian Oil Company (state-owned)	2007	Iran	Jointly develop giant hydrocarbons reserves in Yadavaran Field in Iran	Exploration, drilling, extraction, production, distribution	Joint Venture (Sinopec 51%)	Still exists	Investment, infrastructure, tying customer	Political instability, international sanctions	Resource-seeking, Market Development (Ansoff)	Low competition, military cooperation, Iran's vulnerability
	P2	Sinopec Group (state-owned)							Access to one of the largest oilfields in the Midle East, cheap oil, control over the JV			
3	P1	Exxon Mobil (IOC)	2007	China	Development and operation of a integrated refinery and a chain of filling stations	Construction, Financing Marketing, Operations	Joint Venture (Sinopec 50%, Exxon Mobil 25%, Saudi Aramco 25%)	Still exists	Access to market	Overreliance on one major supplier	Resource-seeking, Technology-seeking, Product development (Ansoff)	Access to and knowledge of the large Chineee market, stong state in China
	P2	Saudi Arabian Oil (SaudiAramco) (state-owned)							Access to market, tying a customer to supplies (some facilities can only use Arabian oil)			
	P3	Sinopec Limited (partially traded)							Stable supply and financing from Saudi Aramco, marketing knowledge from ExxonMobil			

4	P1	Saudi Arabian Oil (SaudiAramco) (state-owned)	2010	Saudi Arabia	Development and operation of a refinery in Saudi Arabia	Development, operations	Joint Venture (Sinopec 37.5%, Saudi Aramco 62,5%)	Still exists	Additional financing, tying a customer	Iran factor, no control over the JV	Market-seeking, Diversification (Ansoff)	Importnace of Saudi Arabia's oil supply, strong state
	P2	Sinopec Group (state-owned)							Access to market, tying a supplier			
5	P1	Repsol (IOC)	2010	Brazil	Jointly develop hydrocarbons in Santos basin in Brazil	Exploration, drilling, extraction, production, distribution	Joint Venture (Sinopec 40%)	Still exists	Additional financing, political leverage, potential access to Chinese market	Political instability, no control over the JV	Resource-seeking, technology-seeking, Diversification (Ansoff)	Lack of technology and expertise in South Amercia
	P2	Sinopec Group (state-owned)							Technology transfer, stable supply, access to South American market			
6	P1	Devon Energy (IOC)	2012	USA	Scaling up shale oil and gas production of Devon Energy	Joint Production	Joint Venture (Sinopec 33% in 5 shale sites)	Still exists	Additional financing	Price volatility, US institutions and regulations	Technology-seeking, Diversification (Ansoff)	Strong institutions, cutting edge technology
	P2	Sinopec Group (state-owned)							Technology transfer, access to market			
7	P1	Royal Dutch Shell (IOC)	2012	China	Exploration and production of shale oil and gas in China	Joint R&D (Exploration and drilling of exploration wells; joint production and subsequent product sharing if results satisfactory)	Prodcut sharing (Shell repayed by product, Sinopec - the only operator)	Still exists	Access to China's shale gas reserves, access to market	Price volatility	Technology-seeking, Product development (Ansoff)	Access to and knowledge of the large Chinee market, stong state in China
	P2	Sinopec Limited (partially traded)							Technology transfer, low risk contract			
Acquisitions												
8	P1	Addax Petroleum (IOC)	2009	Africa, Middle East	Get access to reserves in Africa and the Middle East	Oil extraction	100% acquisition	Still exists	Acess to reserves and markets in Africa and the Middle East	No prior experience of operations of such scale in the politically turbulent region	Resource-seeking	Springboard perspective, weak institutions in the countries of operation, relatively low price of the acquisition following the financial crisis
	P2	Sinopec Group (state-owned)										